

Utah Youth Suicide Study Juvenile Offenders

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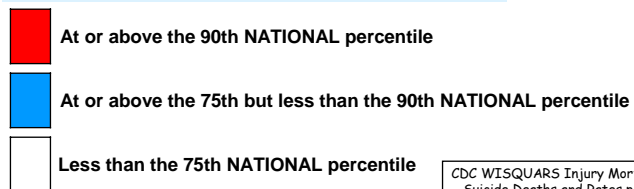
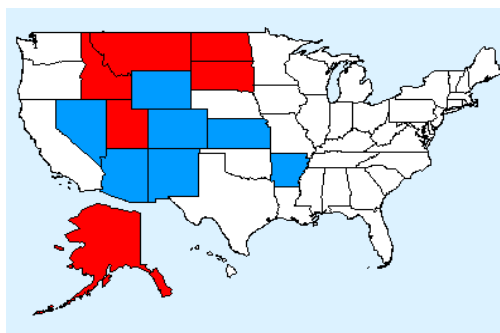
Department of Psychiatry

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Utah Youth Suicide Study Phase 1 1996-1998

Suicide Rates 10-19 years 1989-1998



CDC WISQUARS Injury Mortality Report
Suicide Deaths and Rates per 100,000
All Races, Both Sexes, All Ages

National Research

- Up to 90% of youth suicide completers have a psychiatric diagnosis.
- Co-morbidity of diagnoses separates suicide completers from suicide attempters.
- Very few in mental health treatment at the time of death (5 to 20%).

Utah Research

- 10th highest overall suicide rate in the nation
- Leading cause of death for males 15-44
- Demographically similar to U.S.,
 - 88% male
 - majority by firearm

Objectives

Phase I

- Develop a descriptive profile of Utah youth suicide victims.
- Understand the relationship between suicide victims and the community.
- Evaluate these connections as possible places for intervention.

Methods

Phase I

Medical Examiner's determination of suicide. Every suicide in Utah aged 13-21 years.

Within 3 months

Gather government agency data

Juvenile
Justice

Education

Human
Services

Medical
Examiner

Methods

Phase I

- The Utah Youth Suicide Study included Utah residents, ages 13 to 21, who completed suicide between August 1996 and June 1999.
- Data was collected systematically from multiple government agencies on consecutive youth suicides, using death certificates provided by the Office of the Medical Examiner (OME).

Medical Examiner's Data

- 151 Consecutive Youth Suicides
 - 89% Males, 11% Females
 - 58% Used Firearms
 - 60% Died at Home
 - 93% Caucasian
 - 3% Toxicology Positive for Psychotropic Medication at Time of Death
 - 1% In Public Mental Health Treatment at Time of Death

Juvenile Justice Data

- 63% of youth suicide completers had contact with the Juvenile Court System (n=95 of 151).
- 54% of the 95 subjects involved with Juvenile Court had a referral(s) for substance possession, use, or abuse (n=51 of 95).
- 32% had one felony referral (n=30 of 95).

School Data

- 23% had a special education evaluation.
 - Primarily for behavioral disorders
- 35% had either a suspension or expulsion.

Agency Contact

n=126

Subjects aged 13-21

School records searched

SCHOOL

		Yes	No	Total
JUVENILE COURT	Yes	31% (39)	36% (45)	67% (84)
	No	26% (33)	7% (9)	33% (42)
	Total	57% (72)	43% (54)	100% (126)

Chi-square=11.81, DF=1, p<.001

Conclusions

Phase I

- Majority of Suicide Completers
 - Male
 - Contact with Juvenile Courts
 - Multiple minor offenses over several years
 - > 7 Juvenile Offenses increases risk 5 times
 - 1% in Public Mental Health Treatment
 - 3% on Psychotropic Medication
 - 93% in School or Juvenile Court System

Utah Youth Suicide Study Phase 5 1999-2000

Background Phase V

- Preliminary results (N=151) of the Utah Youth Suicide Study showed that 65% of youth suicide completers had contact with Juvenile Court.
- Referral to Juvenile Court was a risk factor for completed suicide.
- We hypothesized that the Juvenile Court would provide new opportunities for mental health screening, as a future method of suicide prevention.

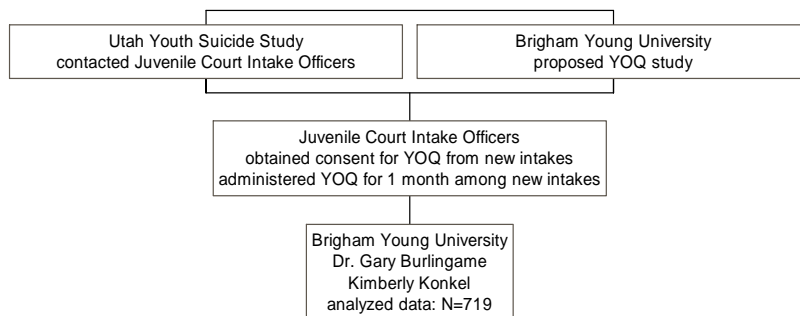
Objectives

Phase V

- To examine the mental health status of a Juvenile Court population.
- To determine if mental health influences rate of recidivism.

Methods

Phase V



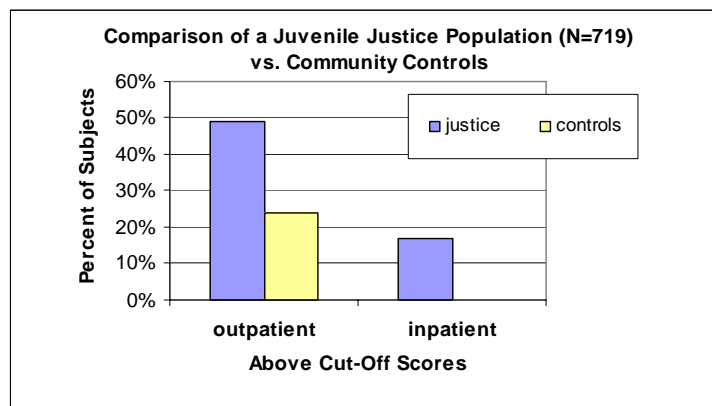
Methods

Phase V

- The Youth Outcome Questionnaire (YOQ) study (1999) included Utah residents who were consecutively referred to the statewide Juvenile Court system, for either status or criminal offenses, over a one-month period (N=719).
- The YOQ is a 64 question parent-report screening tool, which assesses psychological distress and dysfunction associated with mental illness for children and adolescents.
- As a psychometric measure, it provides a comparison to scores from youth inpatient and outpatient psychiatric patients.

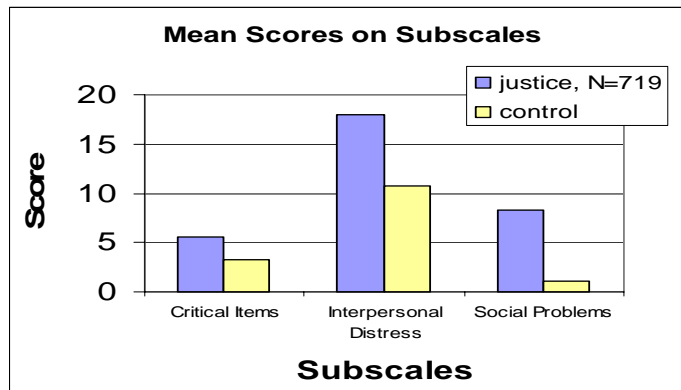
Results

Percent Above YOQ Clinical Cut-Off



Results

YOQ Subscales



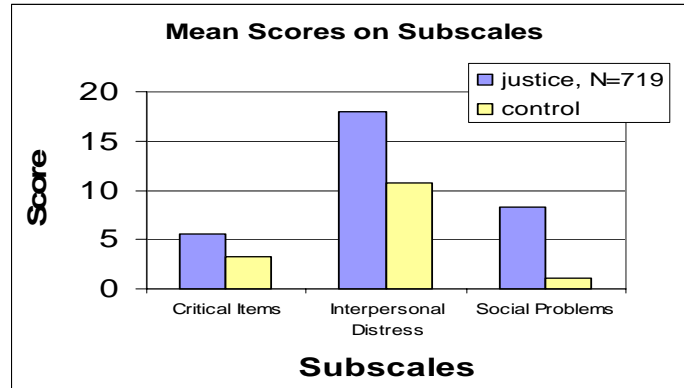
Results

YOQ Subscale Correlates

- Critical Items: symptoms requiring immediate intervention, e.g., suicidal ideation or hallucinations.
- Interpersonal Distress: anxiety and depression.
- Social Problems: conduct problems, aggression, and substance abuse.

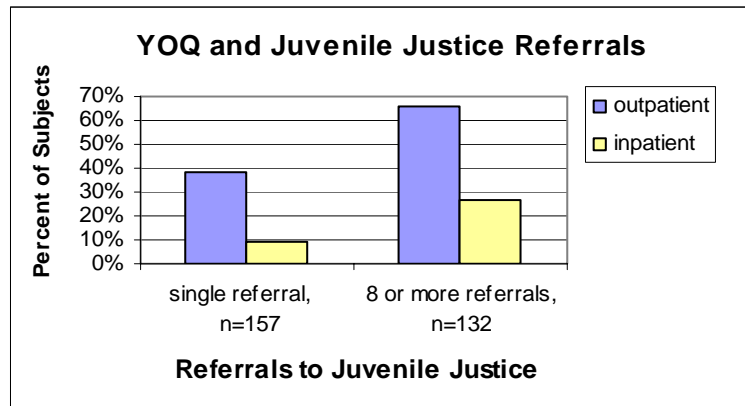
Results

YOQ Subscales



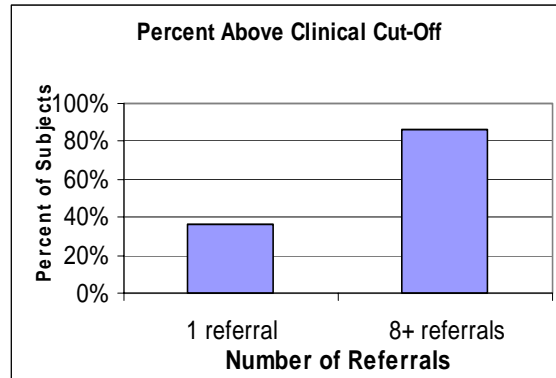
Results

Percent Above YOQ Cut-off Scores



Results: Interpersonal Distress vs. Recidivism

- Interpersonal Distress (ID) correlates with anxiety and depression.
- ID increased with more referrals.



Conclusions Phase V

- Sixty-three percent (63%) of youth who suicide in Utah have had contact with Juvenile Court system and any one referral to the Juvenile Court system increased the odds of suicide 4:1, 8 + referrals 9:1 times the risk.
- The Juvenile Court population has significant psychiatric problems as demonstrated by elevated YOQ scores, and YOQ subscales which correlate with suicide risk factors.
- YOQ scores are directly related to recidivism.

Recommendations

Phase V

- The Juvenile Court system offers a substantial window of opportunity to screen, identify, and refer high-risk individuals for treatment.
- The YOQ may be an appropriate instrument to identify individuals in the Juvenile Court system who are at risk for psychiatric problems, recidivism, and suicide.

Utah Youth Suicide Study

Phase 6

2001-Present

Utility of Partnerships? Accountability and Protection

- Utah Legislature
 - HCR 6: “Resolution on Teen Suicide Awareness and Suicide Prevention” (suicide declared a major public health problem)
 - Primary monies for next phase \$100,000
 - FERPA: Family Education Right to Privacy Act=PARENTS!
- IRBs
 - Utah Department of Health
 - Department of Health and Human Services
 - University of Utah Health Sciences Center
 - Legislative Reports to Utah House and Senate
- Screening vs. Screening, Treatment, Outcomes

Objectives Phase VI

- Will the delivery of an Individual Treatment Plan for mental health services:
 - improve mental health status
 - improve school performance
 - decrease recidivism
 - decrease behavioral problems
 - improve family functioning?

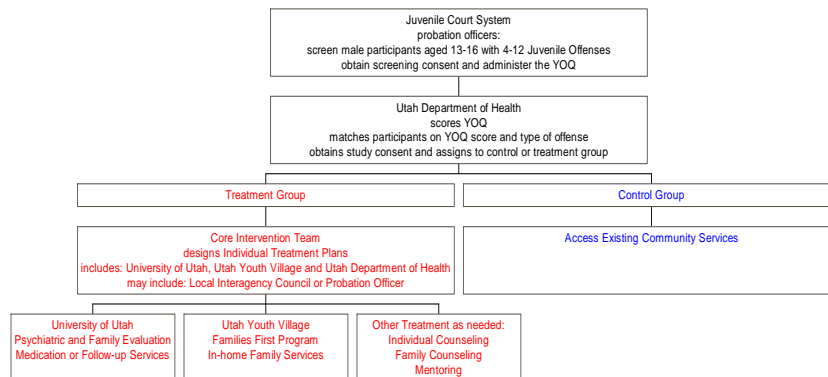
Objectives

Phase VI

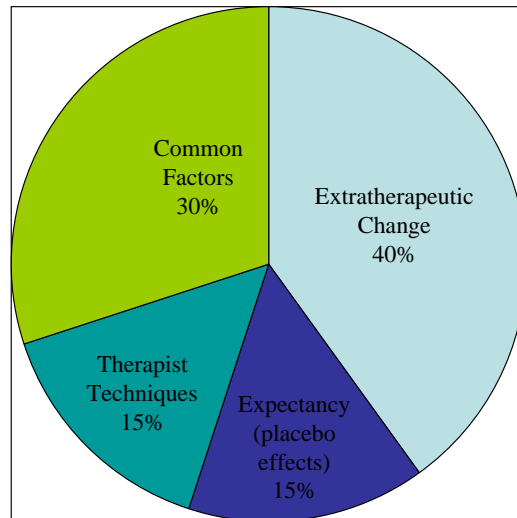
- Will the systematic identification and earlier intervention, at the secondary prevention level, including more intensive, easily accessible, and coordinated family and mental health services, be more cost-effective than existing community family and mental health services?

Methods

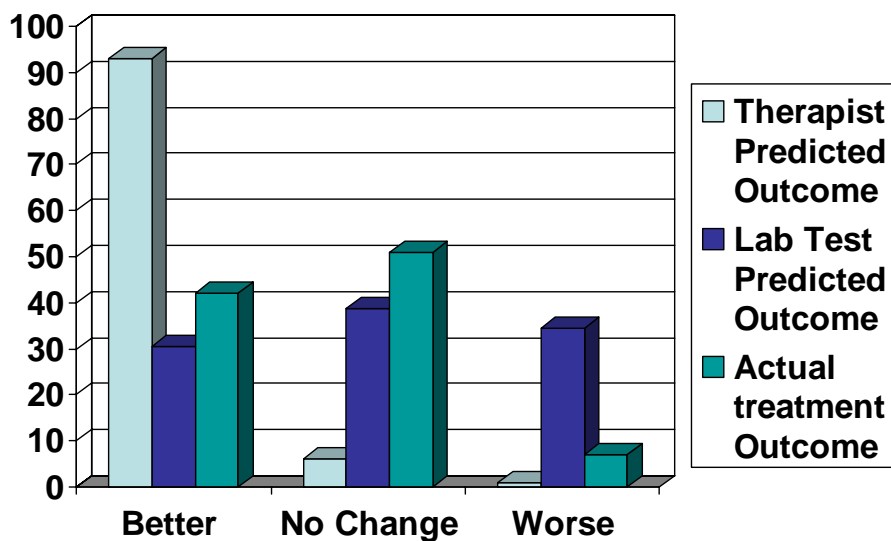
Phase VI



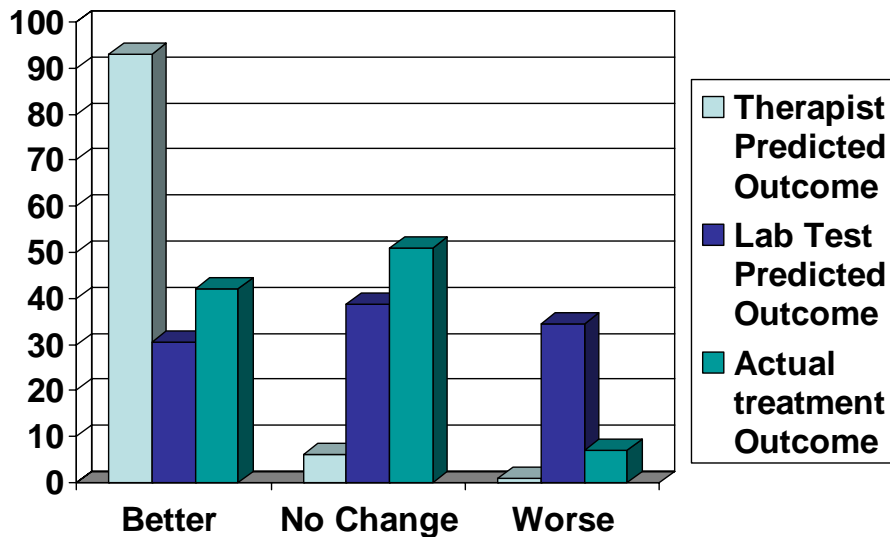
Explaining patient outcome model



YOQ Lab test vs. Clinician Predictions



YOQ Lab test vs. Clinician Predictions



Implications For Practice

- Practitioners are overly optimistic about the positive benefits of therapy they offer
- 90% of clinicians report that their outcomes are above the 75th percentile.
- Therapists are unable to predict which of their patients will deteriorate (Hit rate less than 1%).
- Monitoring patient treatment response with instantaneous feedback to clinicians about a patient's treatment response **should become a part of routine care.**

YOQ Rules for detecting Tx. failure?

- **Red Rule:** The patient is not making the expected level of progress and is likely to drop out or have a negative outcome.
- **Yellow Rule:** Rate of change less than expected.
- **Green Rule:** The rate of change the patient is making is in the adequate range.
- **White Rule:** The patient is functioning in the normal range. Consider termination of treatment activities (not medications).

Screening Process

- When a male youth aged 13-16 was referred for their 2th-12th offense, his parents were approached to participate in this study by their Juvenile Justice Court probation officer.
- The Court Officer provided a brief description of the study.
- The Court Officer obtained the informed consent for the screening process.
 - It is important to note that the parent decision to participate, or not to participate in the study, will have no effect on how their child's case is handled by the Juvenile Justice Court System.

Study Description for Parents

- “You have been asked to participate in a research study by the Utah Department of Health. The study is for male youth aged 13-16 with multiple Juvenile Court offenses.”
- “Based on the questions we asked you at your last visit, your son was found to have the emotional and behavioral issues that make him eligible for this study. Youth with these issues may benefit the most from the support services offered in this study.”

Study Description for Parents

- “The additional support services offered in this study may improve your son’s mental health; help with his school performance; decrease his risk of abusing alcohol or drugs; and, may reduce his involvement in future criminal offenses which puts him in contact the Juvenile Court System. If you agree to participate in this study, you and your son will be randomly assigned to one of two groups.”

Inclusion Criteria (Target Population)

- Juvenile Justice Court Offenses (2-12)
- Male
- Aged 13-16
- Youth Outcome Questionnaire (score 60+)
- Prognostic Assessment (score < 6)

Exclusion Criteria

- PA score 6+
- DCFS out-of-home placement
- Mental Retardation
- Autism
- Physical Disability
 - (hearing, visual, or significant motor impairment)
- Genetic Syndrome
- Non-English Speaking
- In-Patient, Residential or Day Treatment Services
- Previous In-Home Services

Group A

- If your son is assigned to Group A, your family will not receive the Individual Treatment Plan that includes the Families First Program and the assessments. However, you may still seek services in the community as you deem appropriate.
- You will be asked to answer the same list of questions 4 more times over the next year at 3, 6, 9, and 12 months. Remember it only takes 10-15 minutes to answer the questions. However, you will be paid \$10 for your time to answer the questions. You must fill out the list of questions. In addition, you will be paid \$60 after you answer the last list of questions for a maximum of \$100 per family.
- Juvenile Court Records will be reviewed at the same time intervals.

Group B

- If your son is assigned to Group B, your family will receive the family-centered treatment services free of charge. You and your son will work in partnership with professionals to design his "Individual Treatment Plan."
- You will be asked to answer the same list of questions 4 more times over the next year at 3, 6, 9, and 12 months. Remember these questions only take 10-15 minutes to answer. Juvenile Court records will be reviewed at the same time intervals.

Individual Treatment Plan

- a-Psychiatric and Family Evaluation
- b-Utah Youth Village: Families First Program
- c-Completion of the initial questionnaire 5 times by the parents, more specifically, after the Families First Program, and at 3,6,9, and 12 months after his assignment into the treatment group. Juvenile Justice Records will be reviewed at the aforementioned time intervals.

Individual Treatment Plan (PRN)

- d-prescription medications
- e-individual therapy
- f-family therapy
- g-academic tutoring
- h-mentoring
- i-vocational or job training
- j-alcohol and/or other drug treatment

Not Included

- 24 hour crisis intervention
 - except for the six weeks when the family is receiving in-home services
- Emergency room evaluation
- Psychiatric crisis evaluation
- Residential, inpatient, or day treatment hospital services
- Routine medical care

Psychiatric and Family Evaluation

- General information
- Current emotional and behavioral issues
- Family history
- Your son's medical and social history
- An interview with your son
- A summary
- A diagnosis
- Treatment options

Utah Youth Village In-home services

- This in-home service program that supports parents and helps the entire family develop skills to improve family relationships such as communication.
- These services teach youth how to be responsible, respectful and accountable. Family consultants spend time in the home with the family, often evenings, afternoons, or weekends—when the family needs them to be there.

Core Team Intervention

- The treatment activities will be “family-centered.” Community professionals from the Core Intervention Team will present treatment recommendations and discuss treatment options with you throughout the study. You will work equally with the community professionals to plan the treatment activities, or “Individual Treatment Plan.” You will approve all the treatment activities for your son. Therefore, if your son is assigned into the treatment group, your family will be asked to help him when he goes to the activities of the Individual Treatment Plan.

Core Team Intervention

- Parent
- Youth participant
- Psychiatrist
- In-home family specialist
- Study coordinator
- Probation Officer (if requested by parent)

Parent: Family History n=22

Depression	77 %	73%
ADHD	18%	18%
Medication	73%	68%
Suicide Ideation	5%	5%
Suicide Attempt	9%	14%
Suicide Completion	9%	9%
Abuse Physical or Sexual)	5%	5%

Medical Records: Family History n=22

	Attempt	Completed	Self-Attempt
Case One	Aunt; Uncle		
Case Two	Sister		
Case Three	Sister		
Case Four		Great Uncle; Cousin	
Case Five		Uncle	
Case Six	Sister (8)	Brother	1 ideation
Case Seven			2 attempts

Medical Records Diagnoses

- Mood Disorder M
- Substance Use Disorder S
- Conduct Disorder C
- Attention Deficit Hyperactivity Disorder A
- Learning Disability L

Medical Record: Diagnoses n=22

DX	N	Medication	Therapy	M+T	Self-Harm *
MS	4	2**	0	2	Die & Bored
MA	4	1*	0	3*	Die & NS
MSC	2	0	0	2	
CA	2	0	2	0	
M	2	1*	1	0	Bored
A	1	0	0	1	

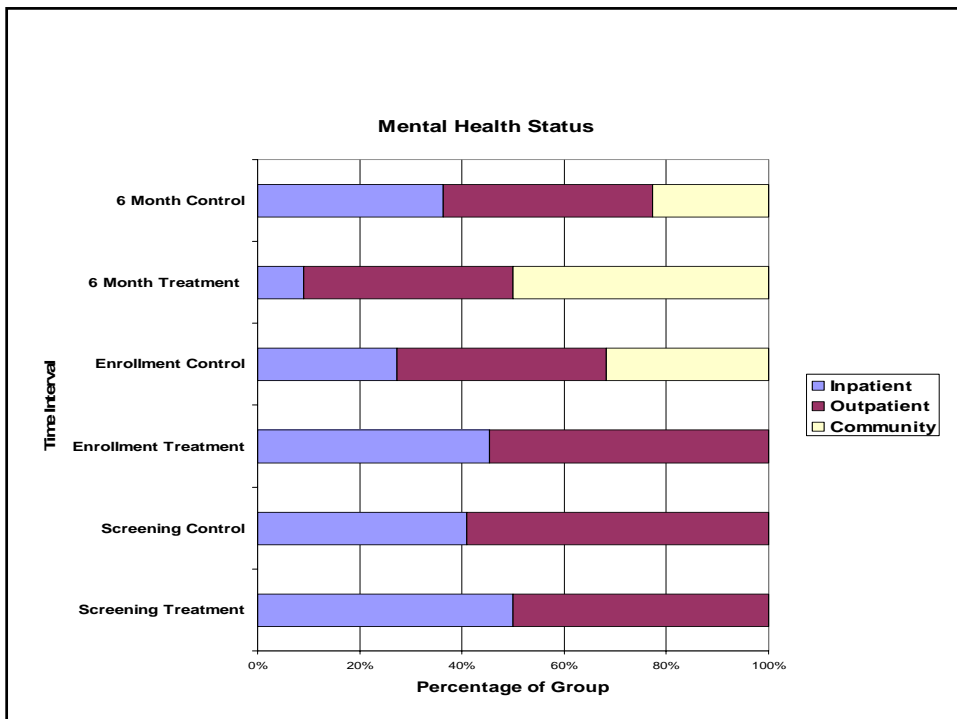
Diagnoses Continued n=22

C	1	0	0	0	
ACL ^H	1	1	0	0	
MC	1	0	0	1	
MCA	1	1	0	0	
MCAS	1	0	0	1*	<Anxiety
AS	1	1	0	0	
CAS	1	1	0	0	

Preliminary Data

- **Mental Health Status**

- Screening
- Enrollment
- 3 Month
- 6 Month



Preliminary Data

- **Juvenile Court Records**
 - Recidivism
 - Re-offend at same level
 - Re-offend at higher level
 - Suppression
 - Re-offend at lower level
 - No Offenses

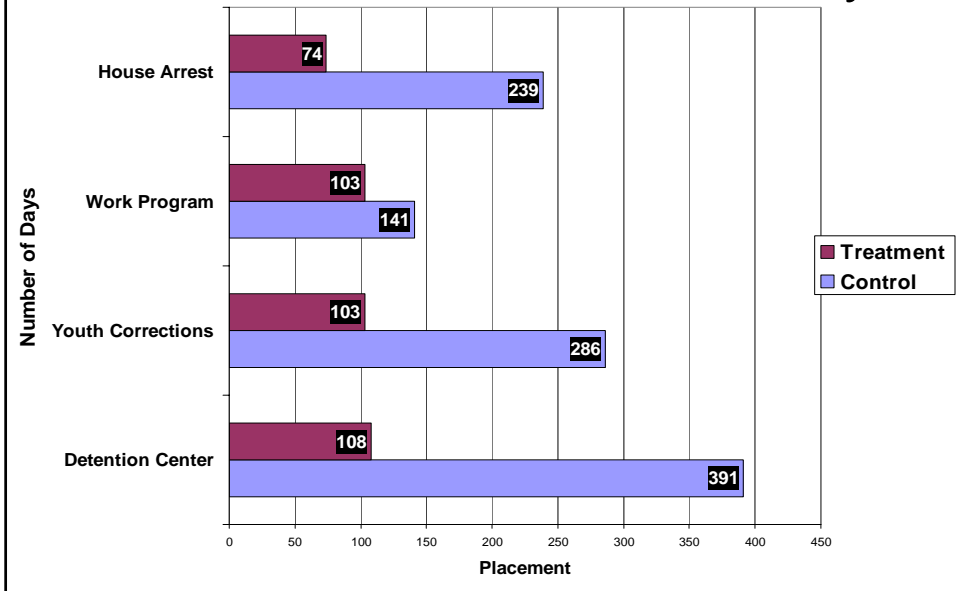
Juvenile Court Offenses

	Treatment Pre-Enrollment	n	Control Pre-Enrollment	n
Felonies	Burglary	2	Theft by Deception	1
	Grow Marijuana	1	Poss. of Stolen Vehicle	1
			Poss. of Explosive	1
Acts Against People	Assault	3	Interfering w/ Arrest	1
			Threaten Life/Property	2
Acts Against Property	Shoplift / Theft	9	Shoplift / Theft	8
	Destruction of Prop	3	Destruction of Property	2
	Marijuana Possession	1		
Acts Against Public Order	Curfew	1	Reckless Driving	1
	Reckless Driving	1	Alcohol Possession	1
			Tobacco Possession	2
			Disorderly Conduct	1
			Poss. of Drug Paraph	1
No Offenses		1		0

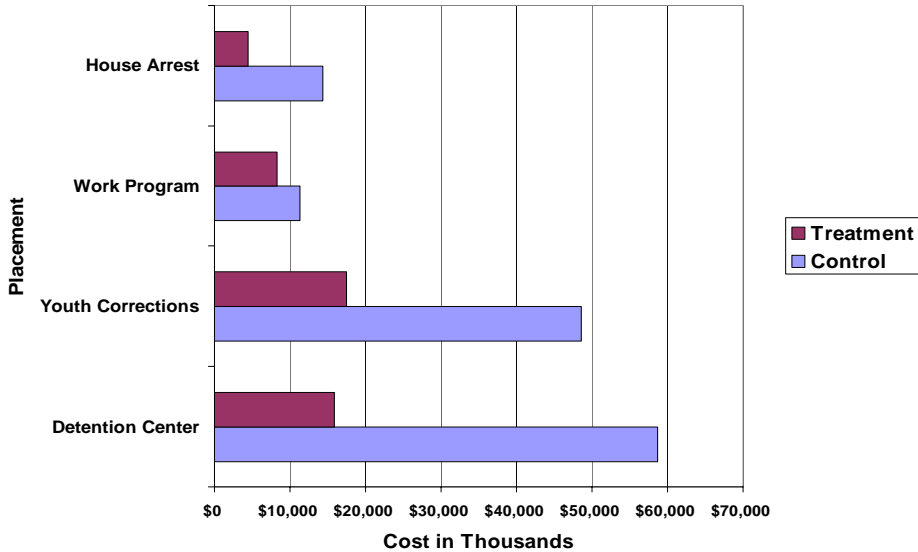
Juvenile Court Offenses

	Treatment Post-Enrollment	n	Control Post-Enrollment	n
Felonies		0	Aggravated Assault Assault by Prisoner	1 1
Acts Against People		0	Assault Threat to Life/Property	2 1
Acts Against Property	Shoplift / Theft	3	Poss. of Marijuana	1
Acts Against Public Order	Poss. of Dangerous Weapon/School Probation Violation	1 1	Poss. of Alcohol Poss. of Tobacco Disorderly Conduct Unlicensed Driver Poss. of Drug Paraphernalia	2 1 1 1 1
No Offenses		17		10

Juvenile Court Placement: Days



Juvenile Court Placement: Cost



Psychiatric Care N=44

Psychiatric	Treatment Cases	Days	Control Cases	Days
Emergency Room	2	2	2	2
Hospitalization	1	6	0	0
Residential Treatment	0	0	1	114
Day Treatment	1	1	0	0
Outpatient Treatment	8	155	5	91

Medical Care N=44				
Medical	Treatment Cases	Days	Control Cases	Days
Emergency Room	4	4	5	13
Hospitalization	0	0	0	0
Primary Care Physician Visits	14	23	18	38

Additional Data N=44				
Other	Treatment Cases	Days	Control Cases	Days
Motor Vehicle Crash	2	-	3	-
Missed Days of Work (parent)	19	73.5	18	81.5

Juvenile Court Cost-Effectiveness				
	n	Treatment Days=Cost	n	Control Days=Cost
Detention Centers	11	190=\$19,000	11	634=\$63,400
Youth Corrections	1	58=\$14,500	6	286=\$101,750
Observation and Assessment	0		3	87=\$17,400
Treatment	22	\$121,000		
Total Cost		\$154,500		\$182,550

In-home Services Cost-Effectiveness		
In-home Family Services	Treatment	Control
Siblings	n=47	n=33
Siblings with Offenses	n=6	n=6
Participants	n=22	n=22
Total Cost Placement	\$154,500	\$182,500
Cost per Family	\$2,239.13	\$3,373.64

Contact Information

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